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This review examines the literature addressing the concept of peer tutoring. Journal articles and education documents written within the last 10 years that discussed peer tutoring were considered. The evidence reviewed overwhelmingly supported the use of peer tutoring and discussed it as an effective instructional strategy. The key points that were proclaimed by peer tutoring advocates were enhanced academic and social benefits to students with and without disabilities. Advocates also encouraged the use of peer tutoring to help meet the educational needs of students with and without disabilities. However, educators interested in implementing peer tutoring practices should make certain that students are properly trained in both roles, the tutor and the tutee roles. (Contains 25 references.) (Author/SLD)

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An Effective Instructional Strategy

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Peer Tutoring: An Effective Instructional Strategy

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ABSTRACT

This review examines the literature addressing the concept of peer tutoring. Journal articles and education documents written within the last ten years that discussed peer tutoring were considered. The evidence reviewed overwhelmingly supported the use of peer tutoring and discussed it as an effective instructional strategy. The key points that were proclaimed by peer tutoring advocates were enhanced academic and social benefits to students with and without disabilities. Advocates also encouraged the use of peer tutoring to help meet the educational needs of students with and without disabilities. However, educators interested in implementing peer tutoring practices, should make certain that students are properly trained in both roles, the tutor and the tutee roles.

Slavin (1990, 1996) noted that cooperative learning methods share the idea that students can work together to learn material that is presented by the teacher. There is supporting evidence that documents the effectiveness of cooperative learning. Enhanced academic achievement, improved intergroup relations, and acceptance of inclusion classmates are benefits derived from peer tutoring. Slavin also stated that students who participated in cooperative learning activities had a more positive attitude towards school than those students who had not.

Joyce & Calhoun (2000) asserted that cooperative learning settings are more motivating than individual competitive environments. Research has shown that cooperative learning increases self-esteem and provides students with the opportunity to work together.

Peer tutoring is a form of cooperative learning that teaches students to work together in a positive manner and to coach one another as they develop specific skills. The purpose of this paper is to review the literature on peer tutoring and to examine the benefits of this type of learning. Research studies, articles that reviewed such studies, and testimonials published within the last ten years were included. The focus areas of this research included the following: (a) the history of peer tutoring, (b) characteristics of peer tutoring, (c) the benefits of peer tutoring, and (d) attitudes of those involved in peer tutoring.

Literature Review

The inclusion of children with disabilities into regular education classrooms reflects society's cultural pluralism. Educators have found themselves concerned with social as well as political issues of society as they try to meet the growing needs of society's diverse population. In an effort to meet those needs, educators have embraced various teaching strategies that will effectively meet the needs of all children. Waldron & Allen (1999) suggested that peer tutoring is

one of the best strategies for helping students with special needs. Other researchers agree that peer tutoring addresses the needs of all children while providing essential academic and social skills for special needs students (Gaustad, 1993; Joyce & Weil, 2000; Mayer, 1998; Vadasy, Jenkins, & Lawerence, 1997; Utley, Mortweet, & Greenwood, 1997).

History

According to Fuchs, Fuchs, Mathes, and Simmons (1997), peer tutoring approaches evolved during the late 18th and early 19th centuries. In 1789, Andrew Bell was the superintendent for a school of orphans in India. Faced with opposition from a faculty reluctant to teach the orphan children, Bell developed a system by which these students could teach themselves. In each class, there was a tutor and a tutee. The students filled nearly every role, including the teachers in the classroom. In a similar case, Joseph Lancaster, in 1801, opened a school for disadvantage boys in England. He used the ideas of Bell to help educate the children in the home. He called his system the Bell-Lancaster system.

In the late 1960's there were great concerns about low achievement among poor and minority students. This concern caused educators to revisit the concept of peer tutoring. According to Joyce & Weil (2000), peer tutoring is a form of cooperative learning.

Peer tutoring is a part of a learning community that teaches students to work together positively and to coach one another as they develop skills. This one on one tutoring has long been recognized as superior when compared to group instruction, especially for students with disabilities (Gaustad, 1993; Osguthorpe & Scruggs, 1986). Cohen (1986) asserted that children have similar cognitive frameworks which enable them to, in some instances, help their peers more so than adults.

Characteristics

Peer tutoring has been described as encompassing the following characteristics: (a) more motivation, (b) improvement of social skills, (c) increased self-esteem, (d) facilitated long-term retention, (e) adapted instruction to the learner's pace, and (f) suitability for heterogeneous classrooms (Gaustad, 1993; Greenwood, 1989; Harper, Maheady, & Mallette, 1999; Joyce & Weil, 2000; Mastropieri, Leinart, & Scruggs, 1999; & Schloss, Kobza, & Alpher, 1997). Peer tutoring requires structuring the environment so that students are paired to practice skills (Schloss, Kobza, & Alpher, 1997). In these dyads, students alternate roles of the tutee and the tutor (Gaustad, 1993; Harper, Maheady, & Mallette, 1999; Schloss, Kobza, & Alpher, 1997). The role of the tutor is like that of the teacher. The tutee's role is similar to that of student. Typically, these children are the same age.

There are other types of peer tutoring. Cross age tutoring is a procedure that possesses many of the same characteristics utilized in peer tutoring except the children are not the same age. This age difference creates difficulty for classroom teachers. The tutor's class schedule and the classroom teacher's schedule may conflict. Scheduling problems and distractions caused by older children (typically the tutors), coming in and out of the classroom, make this type of tutoring less attractive (Gaustad, 1993).

A well-known type of peer tutoring is classwide peer tutoring. Concerned that most teacher designed instruction failed to adequately meet the need of the more diversified classroom, John Delquadri and his colleagues, coined the concept of classwide peer tutoring (CWPT) (Fuchs, Fuchs, Mathes, & Simmons 1997). Classwide peer tutoring was developed at the Juniper Gardens Children's Project in Kansas City, Kansas (Harper, Maheady, and Mallette, 1999). The

overriding purpose was to engage all students in the academic behavior of increasing participation, providing feedback, and producing high mastery levels (Fuchs, Fuchs, Mathes, & Simmons 1997). CWPT uses students within the same classroom and is suitable for students in a heterogeneous classroom (Butler, 1999; Beime, 1991; Delquadri, Greenwood, Stretton, & Hall, 1983). According to Harper, Maheady, & Mallette (1998), CWPT procedures are easy to implement.

The procedure is said to help in the following areas: (a) increase student involvement, (b) combine group and individual accountability, (c) provide an opportunity for all students to be both teachers and learners, and (d) shift responsibility and empowerment to the learner. In CWPT, students are placed in pairs, and the pairs are assigned to a team. Prior to pairing, the procedures are explained to students, and an opportunity for role-play should be provided (Gaustad, 1993). Students are paired based on the goals of the learning activity in which they are to practice the assigned skill. In the dyad, each student should have an opportunity to be the tutor and the tutee. Each partner should correct errors, when appropriate, give feedback, and provide reinforcement. The tutor creates learning opportunities, and the tutee practices and learns the concept (Joyce & Weil, 2000). Points are awarded based on adherence to proper procedures. Each pairs' points will compile the teams' overall score. The scores are placed in a visible area. This serves to praise the winning team and motivate the other teams to try harder.

CWPT is an instructional method used to increase academic engaged time, involve peers, and provide continuous assessment of progress (Butler, 1999). Teachers are willing to implement the procedure because it is appealing and practical (Vadasy, Jenkins, & Lawerence (1997). Teachers also maintain direct supervision over the students (Allsop, 1997 & Greenwood, 1989).

Students appeared to have felt more comfortable in peer tutoring settings. CWPT frees up the teacher to assess student performance more effectively and more often. CWPT provides opportunities for students to respond to academic tasks and experience frequent and immediate feedback. (Allsop, 1997; Beime, 1991; Butler, 1999; Greenwood, 1991; Harper, Maheady, & Mallette; Mayer, 1998).

Benefits

The benefits of peer tutoring include increased academic achievement, higher self-esteem, and improved social skills. Peer tutoring has been directly related to positive achievement effects that are demonstrated in several content areas (Greenwood et al.1984; Greenwood et al., 1987; Greenwood, Delquadri, Hall, 1989; Maheady & Harper, 1987). In a study conducted by Fuchs, Fuchs, Mathes, & Simmons (1997), CWPT appeared to have increased reading scores on a reading assessment test. The researchers used three learner types in the study. The learner types used were: (a) low achievers with disabilities, (b) low achievers without disabilities, and (c) average achievers. Twelve schools with students receiving free or reduced lunch and having scored low on a past reading assessment participated in the study. Twenty teachers used the CWPT for 15 weeks during reading instruction. In creating the dyad, teachers placed stronger reading students with weaker peers. The students participated in partner reading with the retell, paragraph summary, and prediction relay. The partner reading with retell activity required the stronger reader to read a paragraph aloud to his/her partner. The tutee in turn, did the same, only he/she had to retell the events in the order in which the events occurred. The pairs summarized paragraphs after reading the summary activity. Students answered questions on 3 x 5 index cards to help depict the main idea. After the students felt comfortable with the first two activities, the

prediction relay was introduced. This activity was an extension of paragraph summary. The students took turns trying to predict what would happen based on the previous reading material. Proper procedure was adhered to throughout the tutoring. Later test results indicated that the students who participated in CWPT demonstrated higher reading progress (Fuchs, Fuchs, Mathes, & Simmons, 1997).

Examining the teaching of mathematics to six children with moderate cognitive abilities, Schloss, Kobza, & Alpher (1997) conducted a study using peer tutoring to help teach children how to count money to the nearest dollar. Index cards with single dollar and cent values were used as money. The tutees were required to show the tutor the amount needed to purchase an item displayed on a picture card. For example, if the item cost $ 2.78 the tutee had to hold up three dollars indicating that as the dollar amount needed to pay for the item. The researchers indicated that through the use of peer tutoring, students were able to successfully generalize the skill learned to make actual purchases. It was also noted that students frequently smiled and nodded at their partners' correct responses. The outcomes of this study, also suggested that peer tutoring increased motivation and improved social skills (Butler, 1999; Gaustad, 1993; Joyce & Weil 2000; Longwill, 1998; Mayer, 1998).

Mortweet, Utley, Walker, Dawson, Delquadri, Reddy, Greenwood, Hamilton, & Ledford (1999) conducted a study to investigate the benefits of CWPT for students with mild retardation in inclusive classrooms. Two inclusive classrooms, with twenty-seven students in each, participated in this study. Two of the children in each class were diagnosed as mildly retarded. These four children were in the regular education classrooms for spelling. The researchers examined how well the special education students performed using CWPT in comparison to

teacher-led instruction. One class (Class A) used CWPT to learn spelling words and the other depended on the teacher for instruction (Class B). Class A worked with a partner putting list words in alphabetical order, writing sentences using the list words, and spelling words orally. In class B, the teacher used whole class lectures and picture flash cards. Results indicated that children with mild mental retardation benefited more from CWPT instruction in spelling in comparison to teacher led instruction.

Attitudes

To explore teachers' receptivity to CWPT, Vadasy, Jenkins, & Lawerence (1997) conducted a study at a public elementary school in an urban district. The researchers presented two different workshops on CWPT. In the first setting, (referred to as the high support group) research findings and outcomes of CWPT were presented. There was also a question and answer session. The teachers were offered a $50.00 stipend to read the manual on CWPT and implement the procedure in their classrooms for 15 weeks. They were given an opportunity to observe the procedure. Substitutes were provided. In the second setting (referred to as the low support group) teachers attended the same presentation, but they were not offered a stipend. Teachers were given a copy of the manual to implement the procedure if they so desired. Follow-up interviews and surveys revealed both group types were interested in the procedure. Teachers from both groups implemented the CWPT with modifications. These modifications combined or omitted activities and increased or decreased the amount of time allotted for the procedure. Teachers cited concerns for the relationship of the pairs and preexisting goals for their students as major reasons for the modifications.

Longwill & Kleinert (1998) discussed the benefits of peer tutoring in a high school in Kentucky. Students, with and without disabilities, in the high school, enrolled in a peer tutoring course to receive academic credit. The students worked with students with disabilities to complete self-study modules in such areas as beliefs and attitudes, legal rights of people with disabilities, educational programming needs and, family issues. The students took tests, usually in multiple-choice format, on their assigned readings. The students received grades from their daily work and interactions with students with disabilities for whom they acted as tutors. Students were required to read articles on curricular modifications for students with disabilities. Students also took an activity from one of their class assignments and made modifications suitable for students with disabilities. This process seemed to have helped develop close relationships among the students. Although students were receptive to CWPT, Ferguson (1999) suggested that peer appreciation of diversity must be nurtured.

Most children with learning disabilities lack proper social skills for maintaining social relationships (Prater, Serna, & Kayleen, 1999). Children with disabilities tend to have fewer friends and are often isolated in school. These social deficits could affect their lives into adulthood. Peer tutoring has been effective in enhancing academic and interpersonal skills among students with and without disabilities. Prater, Serna, & Kayleen 1999 conducted a study to investigate the impact of peer tutoring on teaching learning disabled children social skills.

Seventeen middle-class Hawaiian seventh graders participated in the study. Students received training in proper peer tutoring procedures. The following skills were targeted in the study: (a) positive feedback, (b) contribution to discussion, and (c) acceptance of negative feedback.

The positive feedback skill incorporated nonverbal behaviors, such as making eye contact, having good posture, smiling, and not intruding on others personal space. The skill of contributing to a discussion entailed the same nonverbal behaviors as the positive feedback skill. This required the student to speak with a pleasant voice. The skill of accepting negative feedback placed emphasis on accepting constructive criticism from an authoritative figure. The students participated in five 20-30 minute sessions for each skill area under teacher supervision. The findings indicated that students improved in all three social areas (Prater, Serna, & Kayleen, 1999).

Summary

This review of literature has presented evidence in support of peer tutoring as an effective teaching strategy. Peer tutoring allows the classroom teacher to implement instructional strategies proven to increase the academic learning of students with and without disabilities. Peer tutoring also appears to not only have academic benefits but social benefits as well, benefits, which were well received by both teachers and students. This review also revealed that students benefit from structured interactions with one another. This interaction can improve communicative skills and teach students to respect individual differences among their peers. Most importantly, it increases the amount of time students have to practice newly learned material and requires all students to actively engage in the learning process. This helps to create an environment in which the teacher is free to monitor and diagnosis students more effectively.

CONCLUSION

Peer tutoring is an effective teaching strategy that can be beneficial to all individuals involved. Teachers seeking to inservice, monitor, and diagnose students on a regular basis should

consider using peer tutoring activities as an integral part of their instructional methodology. Peer tutoring activities also should be considered to facilitate inclusive teaching and learning. However, educators interested in implementing peer tutoring practices, should make certain that students are properly trained in both roles, the tutor and tutee roles.

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